

OST-PTP (M-14): sc-139414

BACKGROUND

OST-PTP, also known as embryonic stem cell protein-tyrosine phosphatase, ES cell phosphatase or Ptpv, is a 1,705 amino acid protein belonging to the protein-tyrosine phosphatase family. OST-PTP catalyzes the removal of phosphate groups from phosphorylated tyrosine residues on proteins. Down-regulated during differentiation, OST-PTP may be involved in the maintenance of pluripotency. OST-PTP is present in the epiblast of oocytes and is detectable throughout embryo development. In adult tissues, OST-PTP has localized expression to gonadal germ cells. OST-PTP is a single-pass type I membrane protein and contains ten Fibronectin type-III domains and two tyrosine-protein phosphatase domains.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ptpv (mouse) mapping to 1 E4.

SOURCE

OST-PTP (M-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of OST-PTP of mouse origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139414 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OST-PTP (M-14) is recommended for detection of OST-PTP of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other PTP family members.

Suitable for use as control antibody for OST-PTP siRNA (m): sc-151334, OST-PTP shRNA Plasmid (m): sc-151334-SH and OST-PTP shRNA (m) Lentiviral Particles: sc-151334-V.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.